

**Docket No.: TJU0001-107**  
**PATENT**

**Serial No.: 10/621,684**  
**Filed: July 17, 2003**

**In the Claims:**

Please amend claims 23, 25, 30-32, 36, 39, 42, 43, 45, 48 and 50, cancel claims 28 and 49, and add new claims 57-61 as follows.

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

**1-22. (Canceled)**

**23. (Currently Amended)** A pharmaceutical composition comprising:

- a) a ST receptor binding ligand selected from the group consisting of: antibodies that bind to ST receptor, antibody fragments that bind to ST receptor and peptides that bind to ST receptor;
- b) a non-peptide radiostable therapeutic agent; and,
- c) a pharmaceutical carrier or diluent.

~~wherein said ST receptor binding ligand is selected from the group consisting of: a peptide, an antibody and fragments thereof.~~

**24. (Canceled)**

**25. (Currently Amended)** The pharmaceutical composition of claim 23 wherein said ST receptor binding ligand is selected from the group consisting of: ~~an antibody that binds to ST receptor, a peptide~~ antibodies that bind to ST receptor, antibody fragments that bind to ST receptor and peptides that bind to ST receptor, wherein said peptides that bind to ST receptor are selected from the group consisting of peptides having an amino acid sequence SEQ ID NO:2, SEQ ID NO:3, SEQ ID NOS:5-56 and fragments and derivatives of such peptides that bind to ST receptor.

**26. (Previously presented)** The pharmaceutical composition of claim 23 wherein said ST receptor binding ligand is a peptide having an amino acid sequence selected from the group consisting of: SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:6 and SEQ ID NO:54.

**27. (Previously presented )** The pharmaceutical composition of claim 23 wherein said ST receptor binding ligand is a peptide having an amino acid sequence of SEQ ID NO:2.

**28-29. (Canceled)**

**30. (Currently Amended)** The pharmaceutical composition of claim 23 wherein said ~~an~~ active non-peptide radiostable therapeutic agent is selected from the group consisting of: methotrexate, doxorubicin, daunorubicin, cytosinarabinoside, etoposide, 5-fluorouracil, melphalan, chlorambucil, cis-platin, vindesine, mitomycin, bleomycin, purothionin, macromomycin, and 1,4-benzoquinone derivatives.

**31. (Currently Amended)** The pharmaceutical composition of claim 23 wherein said ~~an~~ active non-peptide radiostable therapeutic agent is 5-fluorouracil.

**32. (Currently Amended)** The pharmaceutical composition of claim 23 wherein said ST receptor binding ligand is selected from the group consisting of: ~~an antibody that binds to ST receptor, a peptide~~ antibodies that bind to ST receptor, antibody fragments that bind to ST receptor and peptides that bind to ST receptor, wherein said peptides that bind to ST receptor are selected from the group consisting of peptides having an amino acid sequence SEQ ID NO:2, SEQ ID NO:3, SEQ ID NOS:5-56 and fragments and derivatives of such peptides peptides that bind to ST receptor, and the ~~active non-peptide radiostable therapeutic agent~~ is selected from the group consisting of: methotrexate, doxorubicin, daunorubicin,

cytosinarabioside, etoposide, 5-fluorouracil, melphalan, chlorambucil, cis-platin, vindesine, mitomycin, bleomycin, purothionin, macromomycin, and 1,4-benzoquinone derivatives.

**33. (Previously presented )** The pharmaceutical composition of claim 32 wherein said ST receptor binding ligand is a peptide having an amino acid sequence selected from the group consisting of: SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:6 and SEQ ID NO:54.

**34. (Previously presented )** The pharmaceutical composition of claim 32 wherein said ST receptor binding ligand is a peptide having an amino acid sequence of SEQ ID NO:2.

**35. (Canceled)**

**36. (Currently Amended)** The pharmaceutical composition of claim 32 wherein said ~~an~~ active non-peptide radiostable therapeutic agent is 5-fluorouracil.

**37. (Canceled)**

**38. (Previously presented)** The pharmaceutical composition of claim 33 wherein said ST receptor binding ligand is a peptide having an amino acid sequence of SEQ ID NO:2.

**39. (Currently Amended)** The pharmaceutical composition of claim 33 wherein said ~~an~~ active non-peptide radiostable therapeutic agent is 5-fluorouracil.

**40. (Previously presented )** The pharmaceutical composition of claim 39 wherein said ST receptor binding ligand is a peptide having an amino acid sequence of SEQ ID NO:2.

**41. (Previously presented )** The pharmaceutical composition of claim 23 wherein said pharmaceutical composition is an injectable pharmaceutical composition.

**42. (Currently Amended)** A pharmaceutical composition comprising:

a) a ST receptor binding ligand selected from the group consisting of: antibodies that bind to ST receptor, antibody fragments that bind to ST receptor and peptides that bind to ST receptor;

b) a radiostable active agent; and,

c) a pharmaceutical carrier or diluent;

wherein said pharmaceutical composition is a liposome comprising a vesicle matrix wherein the ST receptor binding ligand is in the vesicle matrix and the active agent is inside the liposome, ~~wherein said ST receptor binding ligand is selected from the group consisting of: a peptide, an antibody and fragments thereof.~~

**43. (Currently Amended)** The pharmaceutical composition of claim 42 wherein said ST receptor binding ligand is a peptide having an amino acid sequence selected from the group consisting of: ~~an antibody that binds to ST receptor, a peptide~~ antibodies that bind to ST receptor, antibody fragments that bind to ST receptor and peptides that bind to ST receptor, wherein said peptides that bind to ST receptor are selected from the group consisting of peptides having an amino acid sequence SEQ ID NO:2, SEQ ID NO:3, SEQ ID NOS:5-56 and fragments and derivatives of such peptides that bind to ST receptor, and the active agent is selected from the group consisting of: methotrexate, doxorubicin, daunorubicin, cytosinarabinoside, etoposide, 5-fluorouracil, melphalan, chlorambucil, cis-platin, vindesine, mitomycin, bleomycin, purothionin, macromomycin, 1,4-benzoquinone derivatives, trenimon, ricin, ricin A chain, Pseudomonas exotoxin, diphtheria toxin, Clostridium perfringens phospholipase C, bovine pancreatic ribonuclease, pokeweed antiviral protein, abrin, abrin A chain, cobra venom factor, gelonin, saporin, modeccin, viscumin, volkensin, alkaline phosphatase, nitroimidazole, metronidazole and misonidazole.

**44. (Previously presented )** The pharmaceutical composition of claim 42 wherein said ST receptor binding ligand is a peptide having an amino acid sequence of SEQ ID NO:2 said the active agent is 5-fluorouracil.

**45. (Currently Amended)** The pharmaceutical composition of claim 42 wherein said ST receptor binding ligand is selected from the group consisting of: ~~an antibody that binds to ST receptor, a peptide~~ antibodies that bind to ST receptor, antibody fragments that bind to ST receptor and peptides that bind to ST receptor, wherein said peptides that bind to ST receptor are selected from the group consisting of peptides having an amino acid sequence SEQ ID NO:2, SEQ ID NO:3, SEQ ID NOS:5-56 and fragments and derivatives of such peptides that bind to ST receptor.

**46. (Previously presented)** The pharmaceutical composition of claim 42 wherein the active agent is selected from the group consisting of: methotrexate, doxorubicin, daunorubicin, cytosinarabioside, etoposide, 5-fluorouracil, melphalan, chlorambucil, cis-platin, vindesine, mitomycin, bleomycin, purothionin, macromomycin, 1,4-benzoquinone derivatives, trenimon, ricin, ricin A chain, Pseudomonas exotoxin, diphtheria toxin, Clostridium perfringens phospholipase C, bovine pancreatic ribonuclease, pokeweed antiviral protein, abrin, abrin A chain, cobra venom factor, gelonin, saporin, modeccin, viscumin, volkensin, alkaline phosphatase, nitroimidazole, metronidazole and misonidazole.

**47. (Previously presented)** The pharmaceutical composition of claim 42 wherein the active agent is a non-peptide.

**48. (Currently Amended)** A pharmaceutical composition comprising:

- a) a ST receptor binding ligand selected from the group consisting of: antibodies that bind to ST receptor, antibody fragments that bind to ST receptor and peptides that bind to ST receptor;
- b) an active agent selected from the group consisting of: therapeutic agents and imaging agents; and,
- c) a pharmaceutical carrier or diluent;

wherein said composition is unconjugated.

**49. (Canceled)**

**50. (Currently Amended)** The pharmaceutical composition of claim 48 wherein said ST receptor binding ligand is selected from the group consisting of: ~~an antibody that binds to ST receptor, a peptide~~ antibodies that bind to ST receptor, antibody fragments that bind to ST receptor and peptides that bind to ST receptor, wherein said peptides that bind to ST receptor are selected from the group consisting of peptides having an amino acid sequence SEQ ID NO:2, SEQ ID NO:3, SEQ ID NOS:5-56 and fragments and derivatives thereof that bind to ST receptor.

**51. (Previously presented)** The pharmaceutical composition of claim 48 wherein said ST receptor binding ligand is a peptide having an amino acid sequence selected from the group consisting of: SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:6 and SEQ ID NO:54.

**52. (Previously presented)** The pharmaceutical composition of claim 48 wherein said ST receptor binding ligand is a peptide having an amino acid sequence of SEQ ID NO:2.

**53. (Previously presented)** The pharmaceutical composition of claim 48 wherein said active agent is non-peptide.

**54. (Previously presented)** The pharmaceutical composition of claim 48 wherein said active agent is radiostable.

**55. (Previously presented)** The pharmaceutical composition of claim 48 wherein said active agent is a therapeutic agent.

**56. (Previously presented)** The pharmaceutical composition of claim 48 wherein the active agent is selected from the group consisting of: methotrexate, doxorubicin, daunorubicin, cytosinarabioside, etoposide, 5-fluorouracil, melphalan, chlorambucil, cis-platin, vindesine, mitomycin, bleomycin, purothionin, macromomycin, 1,4-benzoquinone derivatives, trenimon, ricin, ricin A chain, Pseudomonas exotoxin, diphtheria toxin, Clostridium perfringens phospholipase C, bovine pancreatic ribonuclease, pokeweed antiviral protein, abrin, abrin A chain, cobra venom factor, gelonin, saporin, modeccin, viscumin, volkensin, alkaline phosphatase, nitroimidazole, metronidazole and misonidazole.

**57. (New)** The pharmaceutical composition of claim 42 wherein said pharmaceutical composition is an injectable pharmaceutical composition.

**58. (New )** The pharmaceutical composition of claim 48 wherein said pharmaceutical composition is an injectable pharmaceutical composition.

**59. (New )** A method of treating an individual suspected of suffering from metastasized colorectal cancer comprising the steps of administering to said individual a pharmaceutical composition of claim 23.

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**60. (New )** A method of treating an individual suspected of suffering from metastasized colorectal cancer comprising the steps of administering to said individual a pharmaceutical composition of claim 42.

**61. (New )** A method of treating an individual suspected of suffering from metastasized colorectal cancer comprising the steps of administering to said individual a pharmaceutical composition of claim 55, wherein said active agent is radiostable.